

AMENDMENTS TO THE CLAIMS:

Claim 1 (Currently amended): A rotation angle detecting device comprising:

a target including a magnetic member connected integrally rotatably with a rotary member; and

a plurality of magnetic sensors arranged to ~~face~~ ~~confront~~ the magnetic member for outputting signals according to a rotation of the rotary member,

wherein the magnetic sensors respectively include semiconductor MR elements, and at least some of the semiconductor MR elements are formed over and integrally with a common cell of a semiconductor wafer.

Claim 2 (Original): The rotation angle detecting device according to claim 1, wherein the semiconductor MR elements are arranged over the common cell and at circumferential positions different from each other with respect to the rotary member.

Claim 3 (Original): The rotation angle detecting device according to claim 1, wherein the semiconductor MR elements are fixed integrally to a substrate through an adhesive layer.

Claim 4 (Currently amended): A torque detecting device comprising:

a rotation member including a first rotary shaft and a second rotary shaft connected coaxially to the first rotary shaft;

rotation angle detecting devices provided to the first and second rotary shafts, respectively, each of the rotation angle detecting devices including,

a target including a magnetic member connected integrally rotatably with

the corresponding first or second rotary shaft, and

a plurality of magnetic sensors arranged to face ~~confront~~ the magnetic member for outputting signals according to a rotation of the corresponding first or second rotation shaft,

wherein the magnetic sensors respectively include semiconductor MR elements, and at least some of the semiconductor MR elements are formed over and integrally with a common cell of a semiconductor wafer; and

a torque detecting unit for detecting a torque to be applied to the rotary member based on signals outputted from the corresponding rotation angle detecting devices.

Claim 5 (Original): The torque detecting device according to claim 4, wherein all the magnetic sensors contained in the rotation angle detecting devices are constituted by using semiconductor MR elements formed integrally over a common cell of a semiconductor wafer.

Claim 6 (Canceled)

Claim 7 (New): The torque detecting device according to claim 4, wherein the semiconductor MR elements of respective rotation angle detecting devices are arranged over a common cell and at axial positions different from each other with respect to the rotary member.

Claim 8 (New): The rotation angle detecting device according to claim 1, wherein all of

Claim 8 (New): The rotation angle detecting device according to claim 1, wherein all of the semiconductor MR elements in the rotation angle detecting device are formed over and integrally with a common cell of a semiconductor wafer.

Claim 9 (New): The torque detecting device according to claim 4, wherein the semiconductor MR elements of each rotation angle detecting device are arranged over a common cell and at circumferential positions different from each other with respect to the rotary member.

Claim 10 (New): The torque detecting device according to claim 4, wherein the semiconductor MR elements are fixed integrally to a substrate through an adhesive layer.

Claim 11 (New): The rotation angle detecting device according to claim 1, wherein the magnetic member comprises corrugations.

Claim 12 (New): The rotation angle detecting device according to claim 11, wherein said target comprises a plurality of said targets, each said target including a magnetic member comprising corrugations.

Claim 13 (New): A rotation angle detecting device comprising:

a target including a magnetic member rotatable about an axis; and

a plurality of magnetic sensors arranged adjacent to the magnetic member for outputting signals according to a rotation of the magnetic member,

wherein the magnetic sensors respectively include semiconductor MR elements, and at least some of the semiconductor MR elements are formed over and integrally with a common cell of a semiconductor wafer.

Claim 14 (Original): The rotation angle detecting device according to claim 13, wherein the semiconductor MR elements are arranged over the common cell and at circumferential positions different from each other with respect to the rotatable magnetic member.

Claim 15 (Original): The rotation angle detecting device according to claim 13, wherein the semiconductor MR elements are fixed integrally to a substrate through an adhesive layer.

Claim 16 (New): The rotation angle detecting device according to claim 13, wherein all of the semiconductor MR elements in the rotation angle detecting device are formed over and integrally with a common cell of a semiconductor wafer.

Claim 17 (New): The rotation angle detecting device according to claim 13, wherein the target is mounted on a steering shaft of a vehicle.

Claim 18 (New): The rotation angle detecting device according to claim 13, wherein the magnetic member comprises corrugations.

Claim 19 (New): The rotation angle detecting device according to claim 18, comprising a plurality of said targets, each said target including a magnetic member comprising corrugations.